



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,529	03/07/2002	Brett J. Hamilton	N.C. 83337	8381

7590

10/20/2004

DIRECTOR STRATEGIC SYSTEMS PROGRAMS

ATTN: Darrell E. Hollis, Code SPLe-4

Room 10041

287 Somers Court N.W.

Washington, DC 20393-5446

EXAMINER

NGO, NGAN.V

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/091,529	HAMILTON, BRETT J.	
	Examiner	Art Unit	
	Ngan Ngo	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4, 10 and 11 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0302</u> | 6) <input type="checkbox"/> Other: _____ |

The election filed August 17, 2004 has been entered and made of record as paper no. 0804.

Applicant's election with traverse of claims 1-7 and 9-11 in the reply filed on August 17, 2004 is acknowledged. The traversal is on the ground(s) that the "method of claim 8 cannot be practiced on any other circuit board than on a magnetically shield circuit board". This is not found persuasive because the device in claim 1 is a magnetically shield circuit board but can be made by processes different from the processes in claim 8. See the office action mailed July 7, 2004. Applicant has not responded directly to the Examiner's arguments mailed July 7, 2004

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Harvey et al.

Harvey disclosed a magnetically shielded circuit board comprising a circuit board (12), a conductive solenoid (16 and 18) being imbedded in and around the circuit board. The conductive solenoid is inherently received electrical current from a power supply. Note line 52 of column 1, lines 22-23 of column 5, and figures 17 and 18 of Harvey.

In re claim 2, figure 19 of Harvey clearly shows the integrated circuit package on the magnetically shielded circuit board.

In re claim 9, the abstract of Harvey clearly discloses that the "inductive component can be manufactured as part of the integrated circuit" and therefore the integrated circuit chip and the solenoid can be formed in the same package.

Claims 1 and 3 are alternatively rejected under 35 U.S.C. 102(e) as being anticipated by Golan.

Golan discloses a magnetically shielded circuit board comprising a circuit board (21), a conductive solenoid (12) being imbedded in and around the circuit board. The conductive solenoid is inherently received electrical current from a power supply. Note paragraphs [0002], [0057], and [0066] and figures 3 and 4 of Golan.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al in view of Zens.

Harvey discloses all the subject matter discussed above. However, Harvey does not disclose about superconductive solenoid. Zens discloses on lines 25 and 26 of column 1 that the solenoid can be superconductive. Therefore, it would have been

obvious to one of ordinary skill in the art to use superconductive material in Harvey's device to improve the conductivity of the solenoid as taught by Zens.

In re claims 6 and 7, no patentable weight is given to Applicant's intended use of the device in claims drawn to structure. See Ex parte Minks, 169 USPQ 120 and In re Pearson, 181 USPQ 642.

Claims 4, 10 and 11 are allowed.

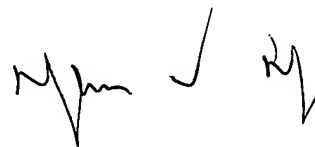
Paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions as of June 2004. Paper copies of foreign patents and non-patent literature will continue to be included with office actions. These cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants are referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 for information on this policy. Requests to restart a period for response due to a missing U.S. patent or patent application publications will not be granted.

Any inquiry concerning this communication should be directed to Examiner Ngan Ngo at telephone number (571) 272-1711. The fax number for the Art unit is (703) 308-7722.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2814

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Ngan Van Ngo', with a checkmark and another signature-like mark to its right.

Ngan Van Ngo
Primary Examiner

Ngan Ngo

October 15, 2004